Report On Optimizing Efficiency in Capital Project Delivery

September 1, 2010

Executive Summary

This Task Force was commissioned by the Capital Projects Advisory Review Board (CPARB) to describe new project delivery approaches which may be applicable to public projects in approved project delivery methods of: Design-Bid-Build, General Contractor Construction Manager (GCCM), and Design-Build formats and to talk about new models that are emerging in the design and construction industry.

This report focuses on changes needed to implement those new models of delivery. It is intended to provide information to CPARB for further consideration and study prior to recommending any changes to the current statutes or creation of new delivery models.

Purpose of this Taskforce and Report

Public owners are coming under increasing pressure to provide better value for capital dollars. In today's world, public owners are frequently compared to their private sector counterparts particularly on the cost and schedule performances metrics. Many times public owners feel, correctly or not, that current laws do not allow them to deliver their capital projects in the most efficient manner possible.

In May 2009, CPARB established the Integrated Project Delivery and Best Value Taskforce (Taskforce) to investigate how public works in Washington State could be improved. The Taskforce's charter was to look at different ways of making public works laws more responsive to current needs of, and pressures on, Public Owners in two specific areas: by the use of Integrated Project Delivery (IPD) methods and Best Value (BV) selection and management methods. In a series of meetings beginning in July 2009, the Taskforce gathered information on the project delivery needs as expressed by the Public Owners in Washington State, on how the design and construction industry is changing, and how project delivery models might be improved under current legislation by the judicious adoption of the underlying principles of IPD and BV procurement methods or by the creation of new project delivery models into the future.

The Taskforce's work product consists of two documents: a white paper dated November 23, 2009 which was endorsed by the CPARB, outlining those approaches possible under current legislation, and this report which focuses on opportunities which require new legislation.

The Taskforce recommends that the legislative opportunities discussed below will help frame the discussions of CPARB and inform CPARB's work plan for the 2011 Legislative Session and beyond.

The Case for Refinement and Transformation of Current Practices

For more than 30 years, the U.S. Architect/Engineer (A/E) and Construction Services marketplace has moved toward team-oriented project delivery. While team-oriented delivery methods such as Design-Build have been popular for more than three decades, in recent years a variation known as IPD has emerged. While similar in concept to Design-Build, IPD requires organization of a team sharing risks and rewards (early on in a project) to be effective. Like Design-Build, IPD can produce better, less expensive, higher quality, and more sustainable projects than traditional forms of project delivery. The team approach is key to making this work. Better decisions can be made quicker on materials, components, systems, and so on with a team of experts working together from the beginning of a project.

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What we heard from Public Owners, Contractors, Engineers, and Architects of the Taskforce: Several challenges arise for Public Owners and all stakeholders when considering more efficient, less expensive project delivery methods:

- Need Subcontractor Input as Early as Possible The input of the General Contractors and Subcontractors (and maybe even suppliers) during the design process is vital to allow for collaboration with the Public Owner, the General Contractor, and the Design Team.
- Early Integration of Team Members and Information is Useful It fosters a more collaborative
 environment from the beginning, integrates schedules, and provides a process intensive focus on
 the desired outcome a Public Owner expects.
- 3. Scale and Complexity of a Project Needs to Match Delivery Methods Project overhead costs are sometimes disproportionately high on small projects. There needs to be a correlation between the scale of the work and the size and complexity for the Public Owner so that a project can be delivered in the most efficient manner.
- 4. Public Owners Would Like the Entire Team to be Qualified to Perform Each Public Works

 Contract Owners expressed an interest in a qualification-based selection for ALL parties
 (designers, contractors, subcontractors, suppliers??). However, this process may preclude
 qualified contractors without a large portfolio and is not desired by some stakeholders.
- 5. **A High Quality Process and Outcome is Desired** Need to develop a higher quality process focused on the long term and focusing on the Owner's end goal for the project.

Consideration of Legislative Changes to Further Optimize Project Delivery Efficiency
Current statutes do not address some of the project delivery attributes listed above for public projects without changing legislative language.

This Taskforce recommends that CPARB consider drafting language that will be submitted to the legislature to refine the current statutes to allow the following suggestions.

1. DESIGN BID BUILD:

- a. Suggested Legislative Changes to the Design Bid Build Delivery Method:
 - Subcontractor Input Needed as Early as Possible: Get major subcontractors, such as Mechanical/Electrical/Plumbing (MEP), involved in the project early (perhaps at DD stage). Include mutually acceptable subcontractor qualification/responsibility/certification requirements.
 - ii. <u>Early Integration of Team Members and Information is Useful:</u> Allow mechanical and electrical design as part of "building engineering systems." This change could allow Public Owners, under traditional public works delivery, to procure "Design-Build" scope for mechanical and electrical subcontract work. This could capture many of the advantages of alternative delivery method's early sub award situation. Similar to RCW 39.04.290 that allows stairs, trusses, fire protection, curtain wall systems, and so on to be bidder designed.

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- Scale and Complexity of a Project Needs to Match Delivery Methods: Use voluntary alternates or bid on performance specifications for small jobs like roofing and elevator upgrades. Allow incorporation of vendor design in construction contracts.
- iv. Public Owners Would Like the Entire Team to be Qualified to Perform Each
 Public Works Contract: Better and more consistent utilization of General Contractor (GC) bidder responsibility qualifications (perhaps pre-qualify bidders).

 Allow the Owner to limit the number of bidders.
- v. A High Quality Process and Outcome is Desired: Create a uniform, statewide evaluation process with consistent criteria and weighting of criteria. Any public owner would be able to disqualify a General Contractor and/or Subcontractor if they get bad "grades" from any other Public Owner.

2. GCCM:

- a. Suggested Legislative Changes to the GCCM Delivery Method:
 - i. Need Subcontractor Input as Early as Possible: See comment below.
 - ii. <u>Early Integration of Team members and Information is Useful:</u>
 Allow for the selection of more of the major subcontractors on the basis of qualifications, fee and general conditions, similar to the selection of the GCCM.
 - Scale and Complexity of a Project Needs to Match Delivery Methods: Consider development of a "GCCM Light" model for those projects under \$10M, but which still have attributes which would otherwise make the GCCM process a more appropriate delivery method.
 - iii. Public Owners would Like the Entire Team to be Qualified to Perform Each Public Works Contract: Not applicable.
 - iv. A High Quality Process and Outcome is Desired: Not applicable.

3. DESIGN BUILD:

- a. Suggested Legislative Changes to the Design Build Delivery Method:
 - i. Need Subcontractor Input as Early as Possible: Not applicable.
 - ii. <u>Early Integration of Team members and Information is Useful</u>: See Pregualification comment.
 - iii. <u>Scale and Complexity of a Project Needs to Match Delivery Methods:</u> Consider lowering the limit for Design-Build projects. Design-Build might be a valuable tool for smaller projects under the right circumstances. The current process might be modified to be more flexible, especially if smaller projects are allowed.
 - iv. <u>Public Owners Would Like the Entire Team to be Qualified to Perform Each</u>
 Public Works Contract: Utilize a simpler and shorted selection process for the

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Design-Build contractor. An abbreviated process could require a less detailed proposal with the selection based more on qualifications.

v. A High Quality Process and Outcome is Desired: Not applicable.

Emerging industry transformation, including IPD, need to be addressed to ensure the efficient use of public funding. This Taskforce recommends that CPARB consider for further discussion the following suggestions beyond the current delivery models.

Multi-Party Agreements – An emerging trend in the private sector is to bring the Owner, Design Team, and Construction Team together under a single contract. This would allow for earlier collaboration and information sharing, the best use of all stakeholder's expertise and talents toward a common goal, proportionately shared risk and reward for all the stakeholders, and connecting first costs to operational costs to evaluate the sustainable development that are made during the process. Further study, including comparisons to other public agencies beyond the state of Washington, needs to be completed by CPARB prior to the suggestion of any specific legislative changes are provided by CPARB..

CPARB and the PRC– The concept of how THE CPARB and/or the PRC might be revised to suit this new way of thinking needs to be considered by CPARB.

Utilize Known Resources: The design and construction industry associations (AIA, ACEC, AGC, DBIA, NASFA, and others) have some very in-depth documents on some of these new delivery models and they have very knowledgeable and sophisticated staff which could also provide information and advice to CPARB going forward.

END OF REPORT

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CAPITAL PROJECTS ADVISORY REVIEW BOARD Integrated Project Delivery and Best Value Taskforce Roster of Participants

Name		Role	Representing	Organization
Norman Strong	Co-Chair	CPARB	Architects	The Miller Hull Partnership
John Lynch	Co-Chair	CPARB	General Administration	General Administration
Bob Maruska		CPARB	Ports	Port of Seattle
Damon Smith		CPARB	Engineers	DCI Engineering
Dan Absher		CPARB	General Contractors	Absher Construction
Ed Kommers		CPARB	Specialty Contractors	Mech. Contractors Assoc.
Larry Byers		CPARB	Insurance / Surety	Contracts Bonding & Ins. Co.
Olivia Yang		CPARB	Higher Education	University of Washington
Vicky Schiantarel		CPARB	OMWBE	OMWBE
Vince Campanell		CPARB	General Contractors	Lydig Construction
Darlene Septelka		PRC	Private Sector	Landon Construction Group
Miriam Israel Moses		PRC	Const. Trades Labor	Rebound
Paul Berry		PRC	Construction Managers	
Rick Benner		PRC	Higher Education	Western Washington Univ.
Dan Galvin		State Gov		Office of the Attorney General
Mark Fleming		State Gov		JLARC
Marsha Reilly		State Gov		House of Representatives
Dick Lutz		Public		Centennial Contractors
Janice Zahn		Public		Port of Seattle
Joe Barnett		Public		King County / Wastewater
Joseph Ward		Public		United States Navy
Josh Swanson		Public		Rebound
Joyce Stahn		Public		King County / Facilities
Kip Eder		Public		Builders Exchange of WA
Larry Stevens		Public		MCA / NECA
Lisa Taylor		Public		King County Wastewater
Mike Myette		Public		UCAW
Mike Purdy		Public		Michael E. Purdy & Assocs.
Paul Galeno		Public		King County
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